

**REMARKS**

Reconsideration of this application is requested in view of the proposed amendments to the claims and the remarks presented herein. Entry of the amendment is requested under the provisions of Rule 116 as it puts the application in condition for allowance or in better condition for appeal.

The claims in the application are claims 1, 8, 13 and 15 to 30, all other claims having been cancelled. The Examiner indicated that claims 21 and 22 were drawn to allowable subject matter. Claim 21 has been combined with claim 1 and therefore, claim 1 is deemed to be allowable as well as claim 22 which is dependent thereon. Claim 14 has been replaced by new claim 23 which clarifies that the method is directed to chelating contaminants and extending the release of therapeutically active ingredients in the duodenum, the jejunum, the ileum and the colon. This is supported by page 6 of the application and particularly in the last paragraph thereof. Claim 11 has been incorporated into claim 23 and therefore, claim 11 has been cancelled.

All of the claims have been rejected under 35 USC 112, second paragraph, as being indefinite for the various reasons set forth in the office action.

Applicant respectfully traverses these grounds of rejection since the claims as amended are believed to properly define the invention. The Examiner's kind suggestions have been adopted. Claim 1 has been amended to use the article "a" and the term "derivative" does not appear in the remaining claims. The typographical errors have been corrected and there is proper antecedent basis for the various terms. The term "such as" has been cancelled. Therefore, the amended claims are believed to properly define the invention and withdrawal of these grounds of rejection is requested.

Claims 1, 13 and 16 to 18 were rejected as being anticipated by the Tanaka et al reference and claims 1, 8 and 22 were rejected as being anticipated by the Takenaka et al reference and claims 1, 3, 11, 14 and 22 were rejected under 35 USC 102 as being anticipated by the Kato et al reference.

Applicant respectfully traverses these grounds of rejection since the amended claims are not anticipated or rendered obvious by the said references cited by the Examiner. Claim 23 and the claims dependent thereon are now directed to a method of chelating the contaminants and extending the release of therapeutically active ingredients by administering the dietary composition containing mushrooms and 30 to 70% by weight of the chitosan and this is in no way taught by the references. With respect to the Tanaka et al reference, this teaches only 1 to 2% by weight of chitosan which is quite different from Applicant's. The amount of 2% cannot play any role as a chelating agent

of contaminants as Applicant's invention is directed to. With respect to the Takenaka et al reference, this relates to a health food composition containing stabilized beta carotene and a mushroom extract with only 1% of chitosan which is completely different from Applicant's 30 to 70% by weight and therefore, the amount of chitosan in the reference is unable to perform Applicant's chelating activity.

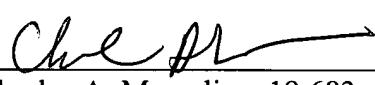
With respect to the Kato et al reference, this relates to a food composed mainly of chitosan of 4 to 60% by weight of chitosan, vitamin D2 and a polysaccharide such as a beta glucan presumably derived from *Grifola frondosa*. The addition of vitamin D2 which is rich in activated vitamin D2 is of paramount importance in the Kato et al compositions. Vitamin D2 is very active and a few milligrams are used to induce a wide range of effects from hypercalcemia to hypertension, hypererlipidemia in adults and the role played by the other ingredients such as chitosan are mainly of a dietary nature and there is no suggestion whatsoever of chelating activity.

Claims 1, 8, 11, 13, 16 and 22 were rejected under 35 USC 102 as being anticipated by newly cited Onodera et al reference which, according to the Examiner, teaches a solution of dry powdered chitosan producing microorganism in acetic acid and teaches adding cells of various fungi to acetic acid to extract chitosan and adding sodium hydroxide solution to adjust the pH. The Examiner concedes that the reference does not teach the claimed composition as being a pharmaceutical dietary composition but deems the ingredients are taught and therefore, the invention is taught.

Applicant respectfully traverses this ground of rejection since the amended claims clearly distinguish from the Onodera et al reference which teaches a composition comprising a solution of chitosan to absorb heavy metal ions and teaches the use of chitosan as a chelating agent. However, the present invention is directed to a method of chelating contaminants and extending the release of therapeutic active ingredients in the duodenum, the jejunum, the ileum and the colon by administering a mixture of mushrooms containing 30 to 70% by weight of chitosan derivatives which increases the absorption of therapeutic substances free of contaminants and this is completely different from that of the Onodera et al reference. This is more clearly brought out in the newly submitted claim 23 and therefore, Onodera et al does not anticipate the present invention. Withdrawal of this ground of rejection is requested.

In view of the proposed amendments to the claims and the above remarks, it is believed that the claims clearly point out Applicant's patentable contribution and favorable reconsideration of the application is requested.

Respectfully submitted,  
Muserlian, Lucas and Mercanti

  
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Enclosure